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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/519,760	10/28/2005	Robert Polfreman	11336/868 (P02061US)	3195
81166	7590	11/19/2008		
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EXAMINER				
ENSEY, BRIAN				
ART UNIT		PAPER NUMBER		
2614				
MAIL DATE		DELIVERY MODE		
11/19/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/519,760

**Applicant(s)**

POLFREMAN ET AL.

**Examiner**

Brian Ensey

**Art Unit**

2614

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 31 July 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6, 9 and 13-36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 15-27 and 31 is/are allowed.
- 6) ☒ Claim(s) 1-6, 13, 14, 28-30 and 32-36 is/are rejected.
- 7) ☒ Claim(s) 9 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12/30/08 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 7/31/08
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

Claims 1, 28, 29, 30, 32 and 33 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "first region" in line 4. There is insufficient antecedent basis for this limitation in the claim.

Claim 28 recites the limitation "cylindrical region" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 29 recites the limitation "cylindrical region" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 30 recites the limitation "cylindrical region" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 32 recites the limitation "cylindrical region" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 33 recites the limitation "cylindrical region" in lines 2 and 3. There is insufficient antecedent basis for this limitation in the claim.

Claims 2-6, 13 and 14 are rejected as being dependent from rejected claim 1. Correction of claim 1 will place these claims in allowable condition.

### ***Claim Objections***

Claim 9 is objected to because of the following informalities: Claim 9 depends from cancelled claim 8. Appropriate correction is required.

***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 34-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hawley et al. U.S. Patent No. 1,715,598.

Regarding claims 34 and 36, Hawley discloses a loudspeaker diaphragm (1) comprising, an inner surface (5), an outer surface (4), a continuous coating (4, 5, See lines 75-94) applied to each of the inner and outer surfaces (See Fig. 2). Hawley does not expressly disclose the coating on the inner surface is thicker than the coating on the outer surface at a corresponding location or the coating on the out surface is uniform when the coating on the inner surface is thicker than the coating on the outer surface at a corresponding location. However, Hawley teaches variations of thicknesses on the diaphragm coatings produces resonances of different periods and provides and desired degree of rigidity at any given point in the diaphragm (See lines 22-33). Therefore, It would have been obvious to one of ordinary skill in the art at the time of the invention to make minor changes in shape and form while providing similar functions such as a combination of both uniform and varying thickness in coatings to achieve the desired rigidity and resonance (In re Dailey, 149 USPQ 47 (CCPA 1976)).

Regarding claim 35, Hawley further discloses the coating on the outer surface is tapered (See Fig. 2).

***Response to Arguments***

Applicant's arguments, see page 16, sections 4 and 5, filed 7/31/08, with respect to claims 15-25 have been fully considered and are persuasive. The rejection of claims 15-25 has been withdrawn.

Applicant's arguments filed 7/31/08, with respect to claims 34-36 have been fully considered but they are not persuasive. Hawley teaches variations of thicknesses on the diaphragm coatings produces resonances of different periods and provides a desired degree of rigidity at any given point in the diaphragm (See lines 22-33). Therefore, It would have been obvious to one of ordinary skill in the art at the time of the invention to make minor changes in shape and form while providing similar functions such as a combination of both uniform and varying thickness in coatings to achieve the desired rigidity and resonance.

Applicant's arguments filed 7/31/08, with respect to figures 1 and 2 have been fully considered but they are not persuasive.

Although the applicant discusses the relationship of Figures 1 and 2 in the detailed description with respect to the pending application, Figures 1 and 2 are merely a common loudspeaker design and a coated diaphragm and therefore must be identified as "Prior Art".

***Allowable Subject Matter***

Claims 15-27 and 31 are allowed

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Ensey whose telephone number is 571-272-7496. The examiner can normally be reached on Monday - Friday 6:00 AM - 2:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curtis Kuntz can be reached on 571-272-7499. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks  
P.O. Box 1450  
Alexandria, Va. 22313-1450

**Or faxed to:**

(571) 273-8300, for formal communications intended for entry and for informal or draft communications, please label "PROPOSED" or "DRAFT".

Hand-delivered responses should be brought to:

Customer Service Window  
Randolph Building  
401 Dulany Street  
Arlington, VA 22314

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Brian Ensey/  
Primary Examiner, Art Unit 2614  
November 17, 2008